

Economic Consequences of Conflict: The Rise of Iraq's Informal Economy¹

Robert Looney

Iraq's economy has undergone a number of profound changes over the last several decades, many of which have had significant implications for the manner in which the country's informal economy has evolved. The statist, heavy-handed economic policies of the Ba'athist government concentrated much of Iraq's productive capacity in nationalized factors, which degraded under the sanctions regime of the 1990s, when both industrial and agricultural production faltered for lack of inputs.

When coalition officials arrived in Iraq after the war, they planned on turning Iraq into a free market economy – a model for capitalism in the Middle East (Looney 2003). As part of this plan, they expected private companies, both foreign and domestic, to play a leading role in jump-starting the economy. Free market incentives driven by pent-up demand and a massive aid-financed reconstruction program were thought to be sufficient to induce a massive wave of investment and hiring of Iraqi workers (Cha 2004). But violence, crime and uncertainty over the future have undermined investor confidence, preventing market-driven mechanisms from playing their anticipated role. As a result, nominal Gross Domestic Product (GDP) contracted by about 35 percent in 2003. It has recovered little since then, despite the U.S.-led reconstruction efforts.

The only part of the economy to have survived both Saddam Hussein and the post-2003 period of instability and insurgency is the country's informal economy. In fact, there is ample evidence that the country's informal economy has expanded considerably since Saddam's overthrow. In this regard, Iraq's informal economy is following a pattern seen in other parts of the world – the informal economy tends to grow during periods of economic crisis. This phenomenon has occurred on each of the main continents:

- In the 1980s, the Latin American economic crisis produced a significant increase in the size of the informal sector and the scope of its activity (Tokman 1992);

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- In the Asian economic crisis of the late 1990s, millions of people who lost formal jobs in the former East Asian Tiger countries tried to find jobs or create work in the informal economy (Lee 1998);
- Structural adjustment in Africa caused the disruption of many long-standing employment patterns and the resulting expansion of informal activities. Once developed, the continent's informal sector has continued to grow unabated and increasingly encompasses massive money laundering and counterfeiting operations, illegal trade in minerals, and the trafficking of humans and narcotics (Fashoyin 1993); and
- Economic transition in the former Soviet Union and in Central and Eastern Europe was associated with an expansion of employment in the informal economy, much of which persists today (Oxford Analytica 2004).

Perhaps because of the inherent difficulties in measuring informal economic activities, compounded by the reluctance of many government agencies to acknowledge its importance, the informal economy has been neglected in policy discussions.² A similar development is occurring in Iraq, where despite the obvious importance of the informal economy, it is barely mentioned in the many official economic reports. In fact, few systematic attempts have been made to integrate the analysis and quantification of the informal economy into an overall review of economic developments in Iraq. This lack impairs understanding of the fundamental workings of the economy. At the macro level, limited knowledge of the size of the informal economy impedes monetary policy's ability to control inflation. At the sectoral level, neglecting the informal economy blurs the ability to understand what is happening with commerce, services, and the regional flow of goods and services. While at the micro level, lack of information on the informal economy hinders an effective assessment of which households can or cannot cope on their own during the transition.

The omission of a systematic treatment of the informal economy impairs the provision of effective advice on the proper course for reconstruction and the policies most effective in inducing maximum gains in productive employment and output. As an initial attempt to fill this gap in our knowledge of the Iraqi economy, the sections that follow develop a framework for understanding the possible extent, causes and policy implications of Iraq's informal economy.

Iraq's Informal Economy Prior to the Overthrow of Saddam Hussein

Historically Iraq was one of the major agricultural countries in the world. However, since the 1950s, the country's economy has been increasingly dominated by the oil sector. While not employing many workers the oil sector in a normal year provides the country with about 95 percent of its foreign exchange earnings.

Data from Iraq's 1997 census can be used to generate labor-force participation rates and employment shares by industry (Table 1). The results, which are limited to civilian employees outside the Kurdish region, suggest that about two-thirds of Iraqi males aged 10 and older were in the labor force, though only 7.5 percent of females in the same

Table 1. Labor Market Data From the 1997 Census

	Men	Women
Civilian labor force as a percentage of population aged 10+	66.8	7.5
Shares of civilian labor force employed in:		
Public Administration	20.1	8.6
Wholesale and Retail Trade	19.3	4.5
Agriculture	18.3	24.1
Manufacturing	4.3	6.4
Education	2.6	37.4
Mining and quarrying (including oil drilling)	0.6	0.7
Other	16.9	15.9
Total	82.1	97.6
Share of civilian labor force unemployed	17.9	2.4
Total	100.0	100.0

Source: Adapted from Foote et al. 2004, 51.

age group were. This rate of female participation is low even among economies of the Middle East.

As is the case with many of the Middle East oil producing states, employment patterns in Iraq have been affected by what is often termed the Rentier State Syndrome (Looney 2004). Because the oil sector itself is not capable of absorbing many workers, a disproportionate number of workers must be absorbed through oil financed public sector employment. The largest employers for men were public administration, wholesale and retail trade and agriculture. For women, major employers were education, agriculture and public administration. At the time of the census, about eighteen percent of men and two percent of women were unemployed (Foote et al. 2004).

Because the sanctions regime of the 1990s placed severe constraints on government revenues, the private sector had been expanding relative to the public sector throughout this period to the extent that before the April 2003 war, a minority of the country's workers were employed by the government. Most people worked in the private sector, though a majority of these jobs were in the informal sector. Many were engaged in trading or subsistence agriculture or some other form of self-employment.

While Iraq's oil has always held out the prospect for future prosperity, the unfortunate fact is that most oil-rich developing countries are underperformers across a whole spectrum of economic, social, political and governance standards (Gelb, 1988). Large windfall gains associated with a rapid increase in oil prices have been a particular problem in that they "appear to create severe distortions in the working of the economy and the political system with strongly negative socio-political consequences" (Stevens 2002). In countries as diverse as Iran, Nigeria, Venezuela, and Indonesia, the combination of state infancy and revenue windfalls has proved overwhelming, undermining even the best efforts to develop each country's non-oil economy, eradicate poverty and improve living standards for broad-based segments of the population (Isham et al. 2002).

Almost universally, agriculture has been adversely affected by the growth and expansion of the oil sector. In the case of an initial agricultural-based economy such as Iraq's, a commonly observed pattern is one whereby the exchange rate appreciation resulting from a ramp up of oil exports is likely to reduce the profitability and competitiveness of traditional agricultural exports. It would also encourage imports of food and raw materials, which may compete with domestic production; it is also likely to discourage the emergence of new manufacturing exports, essential for the successful diversification of the economy and job creation in the formal economy (Looney 2004a, 17).

Within this environment, economic policy and government actions have also contributed to the expansion of the informal economy. Economists have traditionally considered the size of the informal economy to be not only a function of the level of development but, perhaps critically, a function of government policy, particularly with respect to regulation, taxation and the size of the public sector. As has been extensively documented in the literature,³ high taxes and a large but restricted (often by unionization or party membership) bureaucracy have tended to be associated with substantial informal sectors, with the latter acting, in part, as an employment ladder to the public sector (Aarris and Todaro 1970).

In addition, explanations of the relative size of the informal economy in the developing countries have increasingly stressed the importance of relative competences of governments and associated institutions. Where governments have provided an uncertain policy environment, where rules and restraints have been ineffectual, and where public agencies have possessed an overall low level of credibility, the informal sector tends to account for a larger share of GDP as entrepreneurs attempt to evade capricious actions by public agencies. Openness to world market forces tends to minimize the economic distortions that governments can create, thus often reducing the incentives for entrepreneurs to engage in informal activity (World Bank 1997).

Several of these general considerations concerning the extent of the informal economy are borne out empirically. Preliminary analysis (Looney 2006) suggests a clear pattern exists whereby the relative size of a country's informal economy (as a share of Gross National Product (GNP)) is related to its progress in opening up to the world economy. Those countries that are relatively closed and inward oriented (like Iraq around the year 2000) tend to have large informal economies, while those countries open to the pressures of globalization have much smaller informal economies. Furthermore, the informal sector becomes significantly smaller as countries increase their control over corruption.

As might have been expected, Iraq under Saddam fell in a group of countries with the highest probability of possessing a large informal economy. The profile of these countries is an inward-oriented trade regime with high levels of corruption. Other countries in this group included oil-based rentier economies such as Nigeria, Venezuela, Indonesia, and Azerbaijan. A typical share of informal activity in this set of countries was around 35 percent of GDP in 2000 (Looney 2006).

Finally, Friedrich Schneider and Dominik Enste (2002) have calculated the likely shadow labor force in a group of developing countries for 1998. They present values of the shadow economy labor force in absolute terms, and as a percentage of the official labor force under the assumption that the shadow economy in rural areas is at least as

high as in the cities (where the original surveys were taken). While Iraq does not appear in their sample, there is a close relationship between the size of the shadow economy and its associated labor force. Using the 35 percent of GDP figure for Iraq's shadow economy derived above produces an estimate that Iraq's shadow labor force equaled 68.3 percent of the total labor force in 1998. This is equivalent to a shadow labor force of 32.2 percent of the total population.

Factors Contributing to the Size of the Informal Economy

In addition to the general factors noted above, Iraq's informal economy has been affected by that country's on-going crises. Clearly, conflict – wars, sanctions, and insurgency (Looney 2005) – can take a heavy toll on formal activities. When private firms or public enterprises are downsized or closed due to conflict, retrenched workers often find the informal sector the only source of livelihood. Also in response to conflict driven inflation or cutbacks in public services, households often need to supplement formal sector incomes with informal earnings. In severe crises, the breakdown of law and order often leads to an expansion of criminal activity, some of which is carried out in the shadow economy – street vendors selling stolen merchandise, etc.

Given the complete lack of data normally used⁴ (currency holdings, electricity usage, tax returns, national income accounts) to infer the size of a country's informal economy, informal activities in post-Saddam Iraq must be deduced from an indirect set of indicators. The key is to identify those forces most likely to provide incentives to operate in the informal economy and those which might make informal activities less advantageous.

Individuals in Iraq are likely, within a given security environment, to respond to a series of demographic and economic pressures as well as various institutional constraints. In this regard, since the overthrow of Saddam, several sets of competing forces have been at work to expand the size of the country's informal economy. The uncertainty created by the insurgency together with on-going corruption is likely to have increased the size of Iraq's informal economy. This situation is compounded by the country's population bulge, which is accelerating the number of new workers coming into the labor force.

Demographics

While rapid population growth is no doubt a significant factor in the rise of Iraq's informal economy, its precise role, is hard to assess. For one thing, our picture of Iraq's demographic structure and change over time is far from perfect (EIU 2004). Specifically, there are serious doubts about the population figures produced in Iraq's last official census conducted in 1997. That census suggested a population of 21.7 million. Building on that census, the United Nations (2005) estimates Iraq's population at around 25 million in 2000 (Table 2).

This figure is roughly consistent with figures obtained from the now dissolved Coalition Provisional Authority (CPA). These estimates suggest that excluding those resident in the three self-ruled Kurdish provinces, the country's population in 2001 was 21.5

million. Rough estimates for these three provinces would indicate that some 4 million people resided there in 2001.

Second, the precise rate of population growth is also unknown. The United Nations estimates the growth gradually decelerating from 3.1 percent per annum during the period 1990-95 to around 2.8 percent in 2000-05. The International Monetary Fund (2004) estimates the current figure at 2.7 percent per annum, while lower than the early 1990s is still relatively high, even for developing countries. Relatively high rates of population growth are likely to continue over the next decade because of the large number of females in the high birth rate age groups.

Third, albeit to a lesser extent, the precise extent of urbanization is also unclear. For a developing country, Iraq appears very urbanized. The growth of cities has been rapid ever since the adoption of state planning policies in the 1960s designed to develop industry and to manage the agricultural sector. In fact, the country is likely to have experienced an accelerating trend of migration to urban centers from less prosperous rural areas. Rough estimates suggest that Baghdad and its surrounding province accounted for more than 31 percent of the population at the time of the 1997 census. A rough figure of the country's urbanization is 65 percent of the population now reside in towns. Data from the World Bank (2004) suggests the country's urban population grew by approximately 5 percent a year between 1970 and 2000.

The youth bulge in Iraq has numerous implications for the informal economy as well as the economy in general. Specifically, Iraq's case is more severe than most Middle Eastern countries with similar demographic profiles, due to the sanctions period of the 1990s severely dampening the country's job creation potential. There is little doubt that young first-time Iraqi job seekers bore the brunt of high unemployment and stagnant real wages in the 1990s. This continues to be the case today.

The other side of the demographic pressure on labor markets is the pattern of employment in the formal sector. With significant pay increases (Schumway 2004) for public workers and little private sector employment, a dualistic labor market is being created. Higher wages and non-wage benefits, together with job security in the public sector, has resulted in a disproportionate number of Iraqis seeking work in this sector as opposed to the private sector.

At the same time, the attractiveness of public sector employment, especially for those with a secondary education, raises the wage many expect to earn in the private sector. The subsequent inability to attract qualified workers needed to direct and supervise those with limited education and skills further stifles private sector expansion. This process, also dominant in Iraq starting with the Ba'athist rise to power in the 1960s, and continuing up to around 1988 (Looney 2004b) was previously able to avoid high levels of unemployment and the growing informal economy through the rapid expansion of the public sector. Starting with greatly constrained finances in the sanctions period, slow public sector employment growth has simply left the unemployed or forced them to drift into the informal sector. The result is a two-tier system that overprotects formal-sector public employees and under-protects workers in the informal sector.

Table 2. Iraq: Demographic Profile Medium Variant, 1970-2020

Indicator	Year	1970	1975	1980	1985	1990	1995	2000	2005	2010	2015	2020
Population (thousands)		10,112	11,972	14,093	16,288	18,515	21,632	25,075	28,807	32,534	36,473	40,522
Male Population (thousands)		5,100	6,051	7,132	8,246	9,378	10,956	12,700	14,587	16,471	18,461	20,496
Female Population (thousands)		5,012	5,921	6,961	8,042	9,137	10,676	12,375	14,221	16,063	18,012	20,026
Population sex ratio (males per 100 females)		101.8	102.2	102.5	102.5	102.6	102.6	102.6	102.6	102.5	102.5	102.3
Percentage aged 0-4 (%)		18.8	19	18.2	17.2	17.3	16.6	16	15	13.8	12.9	12
Percentage aged 5-14 (%)		28.6	28.9	28.9	28.6	27.3	26.9	26.6	26	25.2	23.8	22.5
Percentage aged 15-24 (%)		18.7	18.4	19.5	20.5	20.7	20.6	20	20.2	20.4	20.3	20
Percentage aged 60 or over (%)		4.9	4.8	4.8	4.8	4.8	4.6	4.5	4.5	4.5	4.9	5.6
Percentage aged 65 or over (%)		3.1	3	3	3.1	3.1	3	2.8	2.8	2.9	3	3.4
Percentage aged 80 or over (%)		0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4
Percentage of women aged 15-49 (%)		42.5	41.9	42.9	44.5	45.8	46.9	48.1	49.5	50.9	51.9	52.7
Median age (years)		16.1	16	16.3	16.9	17.4	17.9	18.4	19.1	20.1	21.3	22.6
Population density (per sq. km)		23	27	32	37	42	49	57	66	74	83	92

Source: United Nations (2005), <http://esa.un.org/unpp/>

Institutional Constraints and Transition Dynamics

In sum, even without the wars and sanctions, it is highly likely that Iraq would have a sizable informal economy at this point in time. Those events, together with the instability and insurgency following the overthrow of Saddam Hussein have only reinforced long standing trends in the country's labor markets. In the post-Saddam era several other factors are also affecting the size of the country's informal economy:

- Compared with the previous regime, there is great political liberalization today in Iraq. In transition economies, this normally results in a larger informal economy.
- The demand for services and trade is particularly high due to the introduction of free trade soon after the fall of the Hussein regime. Again, this factor would encourage the development of an informal economy—petty retailing, street vending of imported goods, etc.
- Currently, bureaucratic discretion and associated corruption are greatly contributing to the informal economy.
- In Iraq's present insurgency, institutional enforcements have weakened, thus allowing the incentives for informal activity to become very high.
- The extent of underdevelopment in the rule of law and related institutional enforcement mechanisms have not improved to date. Given the insurgency, the enforcement mechanisms may have even declined.
- In Iraq's case, the present extremely low tax structures should not have been a contributing factor to the informal economy, but many marginal firms do not like to pay any taxes.
- The macro economy has been relatively stable, but rising inflation in some areas may be contributing to an expansion of the informal economy.

Of the items noted above, the most critical factor affecting the size of the informal economy is, no doubt, the inability of the Iraqi government to control corruption. In addition, given the insurgency and uncertainty surrounding political developments, it is safe to say that large segments of the population have reverted to the survival relationships characteristic of the period of sanctions in the 1990s. This is confirmed daily with the news coming out of Iraq describing economic mismanagement (Al-Saadi 2004), vast black markets in gasoline (Noozz.com January 23, 2005), increased crime, and shortages of critical inputs (Murphy 2005). These developments do not bode well and suggest that the current size of the informal economy is considerably larger than in the late 1990s. As noted above, another ominous sign (Davidson 2004) is a recently released index of corruption for 2004. The prestigious Transparency International Corporation ranks Iraq as the most corrupt country in the Middle East. The country's current ranking is 129th out of 145 nations worldwide.

Based on these factors, it is likely that the size of the underground economy has expanded significantly beyond the 35 percent of GDP figure, noted above, for the end of the Hussein regime. A safe estimate, in light of the insurgency and its detrimental impact

on investment, electricity, and transport, would put the informal economy at around 65 percent of GDP.

In addition to the factors noted above, the informal economy may be growing simply because of the constraints limiting expansion of formal economic activity. Just as private capital formation is often critical to the development of a thriving modern economy, social capital creation may be just as essential in creating the shift to more formal activities. Again, corruption plays a significant role in structuring the informal – this time through its effect on the country's social capital.

Social Capital

Social capital refers to networks of relationships that bind people together.⁵ Social capitalists distinguish such relationships from physical capital and, the attributes of individuals, or human capital (Scanlon 2003). In the context of Iraqi reconstruction and the establishment of a market economy, a key element of social capital centers on a component of social capital, the notion of trust.

Clearly, trust in government institutions will be a necessary prerequisite before Iraq can expect any type of significant expansion of the formal economy. Here is where the country's problems lie. One of the main impediments to a formal market in Iraq today is the absence of trust at most levels. The Ba'athist government created a profound imprint on the nature of formal and informal institutions in Iraq. Not only did, Ba'athism hamper the emergence of a market economy, it corrupted the judicial and legal institutions needed to create and nurture trust.

In short Iraqi values today are no longer those that were reported in earlier accounts of the pre-Ba'athist period, which stressed the country's vibrant entrepreneurial spirit. Individual and managers' values have been affected by years of repression under authoritarian top-down decision making. In an environment of several decades of political and economic insecurity, doubt and distrust are deeply entrenched in the individual mind. They represent a major constraint against drawing entrepreneurs and individuals out of the safe, kinship-based informal economy.

Skill Constraints

Contrary to popular belief, Iraq does not have an abundance of educated, skilled workers. In particular, the country's workforce currently lacks many of the skills needed for dynamic private sector growth in the formal market.

Many deficiencies can be traced back to the socialist development plans adopted in the 1960s. On the demand side, Iraq adopted a full employment policy in 1968, committing the public sector to provide jobs for each and every individual regardless of market forces. The result was over employment in the public sector. At the same time, the private sector was denied a normal flow of technically skilled secondary graduates and young university graduates. This policy created sharp manpower imbalances leading to inflationary pressures and lower overall national productivity (Looney 2004a). Yet the program was sustainable with oil revenues camouflaging the economy's underlying struc-

tural weaknesses.

In addition, and especially prior to 1970, economic development plans in Iraq were founded on the idea of investing in physical plant and infrastructure and did not give development of human capital a high priority. Labor force needs were not spelled out, nor were they based on any realistic estimates of the skill requirements implicit in the planned capital investments. The result was a shortage of skilled workers in certain technical fields and an excess in others (Mehdi and Robinson 1983).

The situation only deteriorated further during the period of sanctions in the 1990s. In addition to further cutbacks in the funding of public education, gender gaps began to grow due to families' economic needs; when given a choice to send a male or female child to school, most chose to keep the girl home. UNESCO estimates that, in 1987, about 75 percent of Iraqi women were literate, but by the end of 2000 that number had shrunk to 54 percent. According to the same estimates, by 2000, Iraq had the lowest adult literacy levels in all of the Middle East (World Bank 2004).

In short, Iraq fell considerably behind neighboring Arab countries in its commitment to human capital formation. A recent survey (Peck 2004) suggests some areas of training and skill formation to which the government will have to give top priority. Survey results are based on 454 interviews of Iraqi business owners or managers with less than one hundred employees. The interviews, conducted from October 17- December 3, 2004 – 264 of which were in Baghdad, 90 in Irbil, and 100 in Hilla – found that (Peck 2004, 4):

1. The top needs in Iraq's workforce are for more English language and computer training;
2. English training is the top concern for two in five business owners (38%) in both Hilla and Irbil; in both cities, computer training ranks second with three in ten (30% in Hilla and 32% in Irbil) citing it as the top need;
3. In Baghdad, however, the need for English training ranks fourth (17%) behind the development of a better work ethic (25%), computer training (22%) and improving the educational system (19%); and
4. Among Shiites, computer training places first (31%); among Sunnis, English training is the top concern (33%). Kurds are slightly more likely than other ethnic groups to call for greater English language training (34%) while Arabs split between more English training and more computer training (24% and 25% respectively).

At the same time that expansion of private sector activity is constrained by shortages of appropriately trained workers, the educational system has declined through years of neglect and destruction and will take years to renovate and restore. According to UNICEF, of 15,000 academic buildings in Iraq, 80 percent are damaged and in need of repair, 40 percent require major reconstruction work, and 9 percent require complete demolition and rebuilding (IRINnews.org 2004). The Iraqi Ministry of Education has set a deadline of four years for rebuilding the system. According to USAID, which has provided the bulk of the funding for the effort, approximately 2,400 schools have already

been renovated.

But reconstruction is not enough: Iraq's growing population means more young minds to school than ever before. In 2000, there were 3.6 million Iraqis of primary school age. Today, there are 4.3 million. The government is struggling to keep up. Overcrowded classes are the norm, and many schools have been forced to run two or three shifts a day, at the toll of less classroom time for the students. UNICEF estimates that a further 4,500 new schools are needed if class sizes are to be brought down to an acceptable level.

The fact remains, however, that spiraling costs for security, construction materials, and labor are restricting the amount the government can realistically achieve in the reconstruction of the education system in the short term. For the time being, the main objective will be to ensure that Iraq's present instability interferes as little as possible with the education of the country's children.

In the meantime, the formal sector will continue to be constrained by a shortage of well-trained workers possessing the skills needed for modern production and distribution.

Dynamics of the Informal Economy

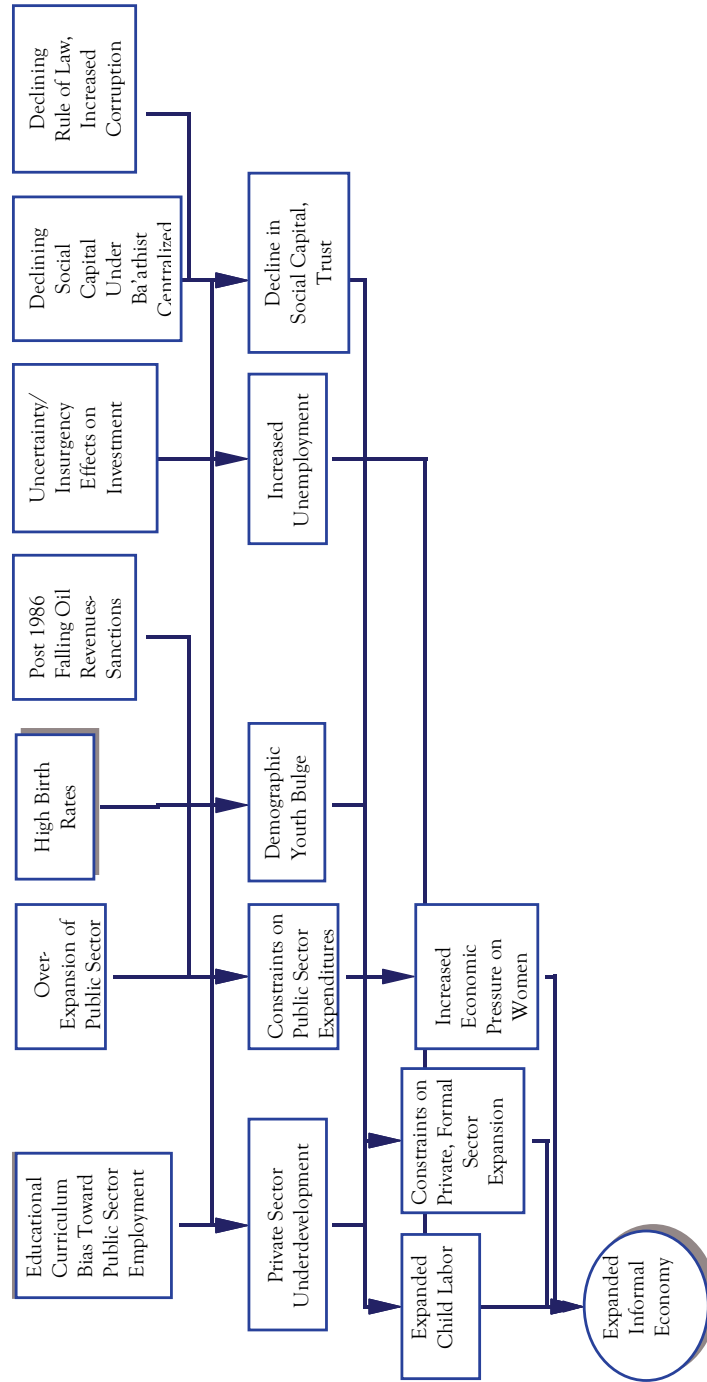
Adding network and labor market conditions to the equation provides additional insights to the factors shaping the overall size, and to some extent, the composition of Iraq's contemporary informal economy. These are summarized in Figure 1, with the informal economy seen largely as a function of fundamental supply and demand factors: (a) a youth population bulge; (b) a long-standing state employment program providing incentives for employment in the public, but not private sector; (c) a workforce of diminished skills following a long period of sanctions; (d) little private sector growth stemming from the instability following the overthrow of Saddam Hussein; (e) deficient social capital, especially in the form of trust, thus confining most private sector transactions to the informal market; and (f) openness to trade (neo-liberal reforms) makes many potentially profitable firms unprofitable. In turn, the lack of a sizable private sector reduces the links often found between the informal and formal economy.

Because the informal economy is largely the result of a convergence of powerful long-run demographic and economic forces, it will be a fixture for some time to come. At best, informal activities may evolve over the next several years with some progression from ascribed based networks to process based networks. If this transition is viewed as successful by Iraqi entrepreneurs and the government makes significant strides in the governance area, then the progression to process based networks and extended modern networks is a distinct possibility, particularly if the security situation stabilizes enough to support foreign direct investment.

Policies Toward the Informal Economy

Given the high costs and futility of attempting a high investment, large-firm-based development strategy, the Iraqi authorities will have to rely on a more balanced approach to

Figure 1. Dynamics of Iraq's Informal Economy



policy. A key element will involve designing a package of reforms capable of providing the right incentives and assurances to induce entrepreneurs in the informal economy to begin investing, growing, and shifting their operations to the formal sector. While this sounds simple and straightforward, there are numerous problems associated with designing public policy in developing countries.

A cursory reading of the professional literature reveals that, in proscribing policies towards the informal economy, analysts often neglect to take into account the impacts or tradeoffs in other parts of the economy – what may be good for speeding up the transition of the informal economy into formal activities may not be good for the general economy or its citizens as a whole. The reverse is also the case. Reforms or policies may appear to make perfect sense for broad-based groups, but not for vulnerable firms and enterprises.

One area of policy that can probably be ruled out from the start is the reliance on market forces under the existing institutional framework in Iraq. As noted earlier, given the sharp cleavage between the formal and informal sectors of the economy, small changes in the costs and benefits of remaining in the informal economy may not produce dramatic shifts of people and resources to the formal sector. It is especially important in this regard to address several factors responsible for the growth of the informal economy in the first place.

Strengthen the Rule of Law. In the past, deterioration in the rule of law and related institutional enforcement mechanisms has shifted the balance of incentives toward participation in the informal economy. Conversely, the costs of operating in the informal economy are likely to increase with increased institutional strength and sophistication of market-based institutions, particularly regarding the country's legal framework, its enforcement efficacy, and the degree of incorruptibility of the judiciary and civil service. As these institutions develop, they should provide checks and balances on potential abuses of bureaucratic discretionary actions increasing the penalty of operating unofficially. In turn, enforcement of contracts and the certainty of objective judicial decisions will contribute to the country's social capital and enable many in the informal economy to extend their operations beyond the predominant family/kinship network.

A related area involves property titles. This is an especially serious problem in the northern parts of the country, where many displaced Kurds and Arabs are attempting to restart their lives. Lack of title is also common in the case of widowed, female heads of household in rural areas. They usually do not have a clear title to their former husband's land and, as a result, are incapable of borrowing needed funds for operating the farm or investing in improvements. Again, lack of critical inputs has forced many women in rural areas to regress to the informal economy.

Maintain Low Taxes. High tax rates, multiple taxation, and constantly shifting tax regimes provide a power impetus for escape to the unofficial economy. The country's tax burden at the present time is relatively low at 15 percent. Care must be taken, however, that the government does not revamp the tax system in a way that makes participation in the formal economy significantly less attractive. This is particularly important to note because the Iraqi government is currently thinking of revamping the tax system to offset decreasing tax revenues (Nooz.com November 11, 2004).

Strive for Greater Macroeconomic Stability. As noted above, the higher the degree of macroeconomic instability, the greater the incentive to engage in unofficial transactions. In particular, macroeconomic instability induces flight to foreign currency, capital flight, and barter transactions. Further, the doctoring of a firm's accounts becomes easier when prices are volatile and changing rapidly. Through most of the post-war period, the macro economy has been surprisingly stable with rates of inflation considerably lower than forecast. The Iraqi dinar has also been stronger than anticipated.

In January 2005, however, the rate of inflation increased to 13.9 percent (Noozz.com February 21, 2005). This increase reflected record increases in commodity prices, medical and transport services, in addition to hikes in commercial and residential rent. Spending on these items accounts for 90.3 percent of Iraqi household spending.

As part of the country's economic reform program under the Coalitional Provisional Authority (CPA), the Central Bank of Iraq was given independence to pursue price stability. At this point, the bank must stay with that objective if the informal economy is to be contained. However, there are questions concerning the adequacy of the Bank's tools for use in pursuing price stability. Currently, the Bank controls the price level through (1) buying and selling foreign currencies and (2) facilitating banks credits. However, contradictions in policy arise as anti-inflationary efforts put too much pressure on credit markets, thus stifling growth of the formal sector.

Policies Toward Vulnerable Groups in the Informal Economy

While some of the policy suggestions noted above may speed the movement of certain groups out of the informal economy, much more should be done to assist specific groups largely trapped in that sector, in particular, children and women (IMF 2005, 251).

Children. On social grounds, efforts should begin immediately to reduce the country's serious child labor problems. This can be done through enforcing existing labor laws, as well as giving high priority to the restoration and revival of the country's school system. As noted above, improving the education system will make child labor less attractive. On the other hand, to reduce the need for child labor the government needs to provide family subsidies so that children are not critically needed to supplement family incomes.

The Iraqi government is certainly aware of the problem and is working with UNICEF to find solutions. At a UNICEF conference in December 2004 (Noozz.com, December 4, 2005), participants considered child labor one of the major negative aspects of the economy. Participants at the meeting called for the implementation of strict procedures to ban child labor and secure primary education to keep them away from the labor market. The conference formed a committee that includes representatives of the ministries of labor, social welfare, education, security, and health to supervise and control children's labor rights and protect them against employers who violate the law. The committee will also look into cases of sexual abuse and violence exercised against children.

Women. Large numbers of Iraqi women have entered the informal sector due to lost husbands or deteriorating living conditions. The difficulty they face will be determined by their educational backgrounds, Ba'athist ties during the previous regime, the

strength of various religious groups opposed to women working outside the household, and their career choices.

Older women with some education may find that their knowledge deteriorated considerably during the period of sanctions. They may have to be retrained before resuming work in their chosen area. Younger women may have to receive basic education before they can hope to aspire beyond the lower levels of the informal economy.

Women with higher level positions in the Ba'athist party during the 1990s may find that they are effectively barred from the public sector. No doubt many of these will also lack the skills and training to succeed in the informal economy, especially in jobs that require strong business skills and a willingness to assume some risk. In addition to constraints imposed by religious groups, credit would appear to be the main factor limiting women from running small businesses in the informal sector. While some micro-credit efforts are yielding encouraging results, the ability and willingness of the country and its banking system to develop this area of support is doubtful.

Ultimately, what happens to women in the coping/informal sector will largely be controlled by developments in the formal sector, as well as the growing power of religious groups. The condition of women in the country will be a good barometer of the manner in which the country and its economy is likely to evolve over the next few years.

Conclusions

While Iraq's informal economy remains largely unmeasured, several tentative observations can be made concerning its overall scope and underlying determinants and their policy implications:

1. Iraq's informal economy has increased considerably since April 2003. The biggest increases have been in the areas of small-scale urban services and criminal activity. Smaller increases have occurred in agriculture and various small scale industries.
2. A safe estimate of the current size of the informal economy is around 65 percent of GDP, although this may be a bit conservative. Approximately 80 percent of the labor force is engaged in informal activity, if one assumes that many workers listed as unemployed are really using the informal economy as a coping strategy until formal sector jobs appear.
3. Higher rates of economic growth, or even a lessening of the insurgency with stepped-up reconstruction efforts, are not likely to result in a significant decline in the size of Iraq's informal economy in the near term. Instead, there are a number of more policy-centered measures available to stop and reverse the expansion of the informal economy. These include improved governance, especially improving the rule of law and anti-corruption measures. Specific tax policies, together with macroeconomic stability would also provide incentives for individuals to move into more formal activities.
4. This strategy might be supplemented with an expanded social net designed to provide short run security, especially for two of the more vulnerable groups: women and children.

Notes

1. The author would like to thank two anonymous reviewers for their constructive suggestions. An earlier version of this paper was presented at the MIT Workshop on the Politics of Reconstructing Iraq, Cambridge, Mass, April 4, 2005.
2. A notable exception is the International Labor Organization (ILO) whose many publications have stimulated some debate on the issue.
3. For an extensive survey see Schneider and Enste, (2002), and J. J. Thomas (1992).
4. For a survey of the standard methods of estimating the size of the informal economy see Schneider and Enste (2002).
5. An excellent overview of the literature on social capital can be found in Paldam (2000).

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